



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,622	03/30/2005	John D. Cleary	11636N/1550US	1994
32885	7590	05/06/2009	EXAMINER	
STITES & HARBISON PLLC			PESELEV, ELLI	
401 COMMERCE STREET			ART UNIT	PAPER NUMBER
SUITE 800				1623
NASHVILLE, TN 37219			MAIL DATE	DELIVERY MODE
			05/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,622	<b>Applicant(s)</b> CLEARY ET AL.
	<b>Examiner</b> Elli Peselev	<b>Art Unit</b> 1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 February 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,3-6,8 and 17-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1, 3-6, 8 and 17-24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/1449)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 12, 2009 has been entered.

Claims 1, 4-6, 17, 18, 22 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The terminology "at least 95% Amphotericin B and no greater than 5% of impurity products" (claims 1 and 6) and "at least 94% amphotericin B polyene compound" (claim 22) is not disclosed in the specification as originally filed.

Applicant's arguments filed February 12, 2009 have been fully considered but they are not persuasive.

Applicant contends that the terminology on page 3 of the specification which describes substantially pure amphotericin B, which is greater than about 90% pure, provides support for the terminology "at least 95%". This argument has not been found persuasive. A range does not provide support for the specific numbers within said range. The *In re Wertheim* case has been considered. In that case a range limitation of "between 35% and 60%" was considered to meet the description requirement based on

the disclosure of "25%-60%" range and specific examples of "35%" and "50%". However, in the instant case page 3 of the specification provides support for "greater than about 90% pure", "greater than about 96% pure, and "greater than about 97, 98, or 99% pure". In the instant case the terminology "greater than 96%" pure does not provide adequate support for the terminology "at least 95%" and "at least 94%".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-6, 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopez-Berenstein et al (U.S. Patent No. 4,663,167) in view of Michel et al (U.S. Patent No. 4,902,789) or Tang (U.S. Patent No. 4,308,375).

Lopez-Berestein et al disclose a method of treating fungal infections with a composition comprising amphotericin B but do not disclose purification of amphotericin

B. However, since purification of amphotericin B was well known in the art at the time the claimed invention was made as disclosed by Michel et al or Tang, a person having ordinary skill in the art at the time the present invention was made to use purified amphotericin B in the composition and method disclosed by Lopez-Berestein et al because such a person would have expected less side effects with administration of purified amphotericin B.

Applicant's arguments filed February 12, 2009 have been fully considered but they are not persuasive.

The declaration by Dr. Robert Kramer has been considered. The declaration states that Michel et al disclose a four solvent system for purifying amphotericin B and that implied purity of 99>9% is based on residue after ignition and is not valid or appropriate measurement in terms of the claimed compositions. The declaration also states that the purity of the resulting amphotericin B was not directly addressed. And that the apparent purity" of the Michel et al product is 91.0%. The declaration also states that purification method disclosed by Tang would not result in the claimed purity of amphotericin B. However, the declaration fails to provide any actual experiments to support said statements. It cannot be ascertained from the declaration presented what actual experimental parameters were used to determine the purity of the amphotericin B produced by the references' processes.

Applicant also contends that traditional amphotericin B induces serious adverse reactions. This argument has not been found persuasive since no comparison of

amphotericin B purified by the references' methods and the claimed amphotericin has been presented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elli Peselev whose telephone number is (571) 272-0659. The examiner can normally be reached on 8.00-4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elli Peselev  
/Elli Peselev/  
Primary Examiner, Art Unit 1623